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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/441,199	11/16/1999	TAKANARI YAMAGUCHI	2185-0380P	3990

7590 12/26/2001

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EXAMINER

MULLIS, JEFFREY C

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 12/26/2001

18

Please find below and/or attached an Office communication concerning this application or proceeding.

T-D-10

Office Action Summary

Application No.

09/441,199

Applicant(s)

YAMAGUCHI ET AL.

Examiner

Jeffrey C. Mullis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2001.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 6-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) g. 6) ☐ Other: _____

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All remaining rejections and/or objections follow.

X
d
Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 from which claim 3 ultimately depends already recites that the rubber is converted to a molten state and that such molten rubber is melt kneaded with the thermoplastic resin. Therefore since the rubber is treated initially, it must be upstream from the thermoplastic.

Claims 1-5 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

d
It is not clear what is meant by "a rubber's viscosity" as recited in claim 2 since this phrase implies that more than one melt viscosity is present for a particular rubber as recited in claim 2. Also it is not clear what the diameter recited in claim 2 has to do with the viscosity since viscosity should be independent of the nozzle for extrusion.

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Claim 3 lacks antecedent basis in claim 1 in that the phrase "fed at a downstream position of the extruder" implies that the process of claim 1 is performed in a single extruder while claim 1 does not recite this. Furthermore, claim 1 does not recite that an extruder is used to treat the rubber prior to addition to the thermoplastic at all and claim 3 therefore furthermore lacks antecedent basis in claim 1 for this reason also.

The term "block-like" in claim 4 is unclear in that the term "like" is subjective. Furthermore the term "block" in the chemical arts generally refers to a polymer segment containing a number of monomer units in the polymer with more than one segment while the alternative of a "bale" would imply that possibly applicants are referring to a geometric shape.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. § 102(e) as being anticipated by Guntherberg et al. (USP 6,165,399).

. See the previous Office action at page 5 line 6 et seq.

Claims 1-5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Guntherberg et al., cited above in view of either Furuta et al. (USP 5,997,765) or Haider et al. (USP 5,216,073).

See the previous Office action at the last complete paragraph et seq. on page 5.

Applicants' arguments filed 9-26-01 have been fully considered but they are not deemed to be persuasive.

. Applicants argue that in claim 1 the feeding position of the moltenized rubber into the main extruder is not specifically limited but that in claim 3 the feeding position of the moltenized rubber is limited as downstream from that of the thermoplastic resin. However claim 3 recites nothing at all about the feeding position of the moltenized rubber and in fact does not even recite that the moltenized rubber is being fed.

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Applicants argue that in claim 2 applicants have changed the phrase "a melt viscosity of the rubber" to "the rubber's viscosity". Applicants' remarks appear to pertain to this change. However no such change has been made as applicants allege.

Applicants argue that melt viscosity is usually independent of the nozzle diameter but that an exception sometimes occurs with rubbers. Applicants are requested to submit a reference supporting this allegation or point out that portion of the specification discussing the relationship referred to.

Applicants argue in the last complete paragraph on page 5 of their remarks that the amendments to claims 1 and 3 correct any ambiguities with respect to this rejection. Applicants are requested to be more specific in this regard. Claim 3 still recites that the thermoplastic resin is fed at a downstream position of the extruder and therefore implies that a single extruder is being used despite the fact that claim 1 does not recite such an element.

With regard to the term "block-like", it is subjective as to when a particular feature is "like" another.

With regard to the rejection under 35 U.S.C. § 102, applicants argue that a water moist elastomer containing 60% residual water is fed into the extruder of Guntherberg '399. However applicants' claims do not exclude such an element.

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Applicants argue that the metering section for elastomers is unheated. While this is true, applicants' elastomers are at some point also not heated. The pertinent question with regard to patentability of the instant claims and whether or not the reference meets the limitation of the claims is whether or not the elastomer of Guntherberg is eventually made molten. Note column 11 lines 12-15 where it is disclosed that the elastomer exits as "a viscous melt". The "section" referred to at column 11 line 15 is part of an extruder and the feeding of such a melt into a section of an extruder therefore meets the limitation of the claims.

With regard to the rejection under 35 U.S.C. § 103, applicants renew their arguments that the prior art does not disclose or suggest a process in which a molten rubber is fed into an extruder. However for the reasons set out above, it is the position of the Examiner that such a process is disclosed as set out in column 11 lines 5-18 of Guntherberg. The secondary references have not been relied upon for any limitations except for those regarding use of specific materials in the process of the primary reference.

THIS ACTION IS MADE FINAL. Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a). The practice of automatically extending the shortened statutory period an additional month upon the filing of a timely first

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response to a final rejection has been discontinued by the Office. See 1021 TMOG 35.

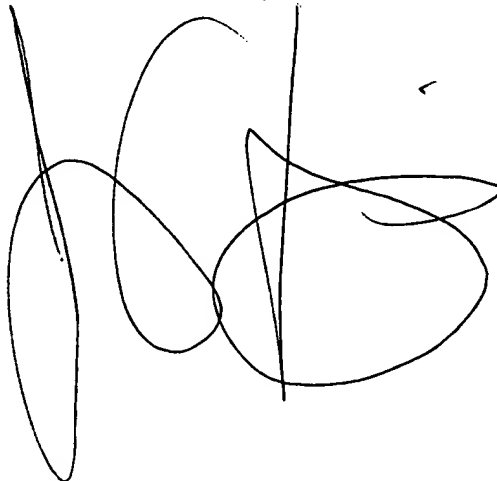
A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication should be directed to Jeffrey Mullis at telephone number (703) 308-2820.

J. Mullis:cdc

December 22, 2001

Jeffrey Mullis
Primary Examiner
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A large, stylized handwritten signature in black ink, consisting of several overlapping loops and a long vertical stroke on the left side.